

FIG. 1 PRIOR ART

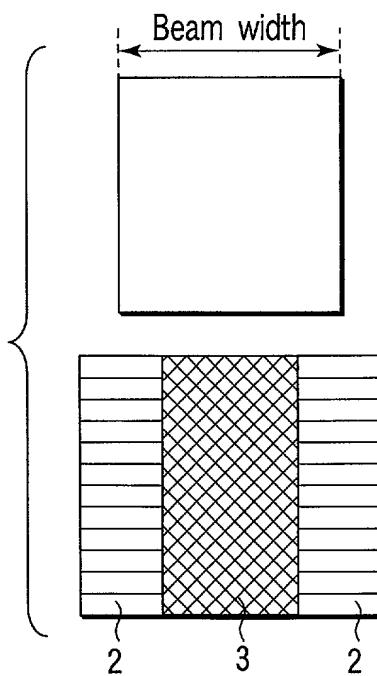


FIG. 3 PRIOR ART

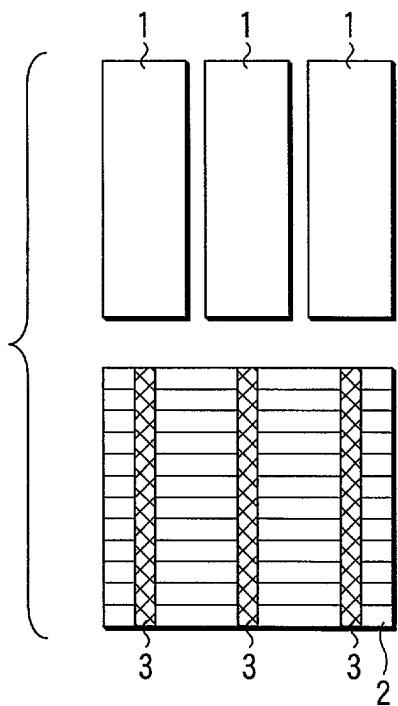


FIG. 2 PRIOR ART

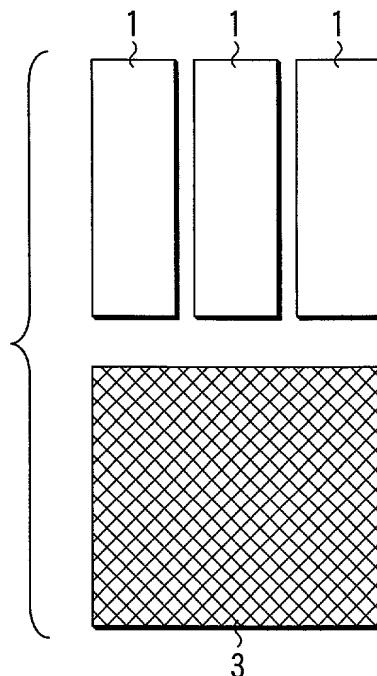


FIG. 4 PRIOR ART

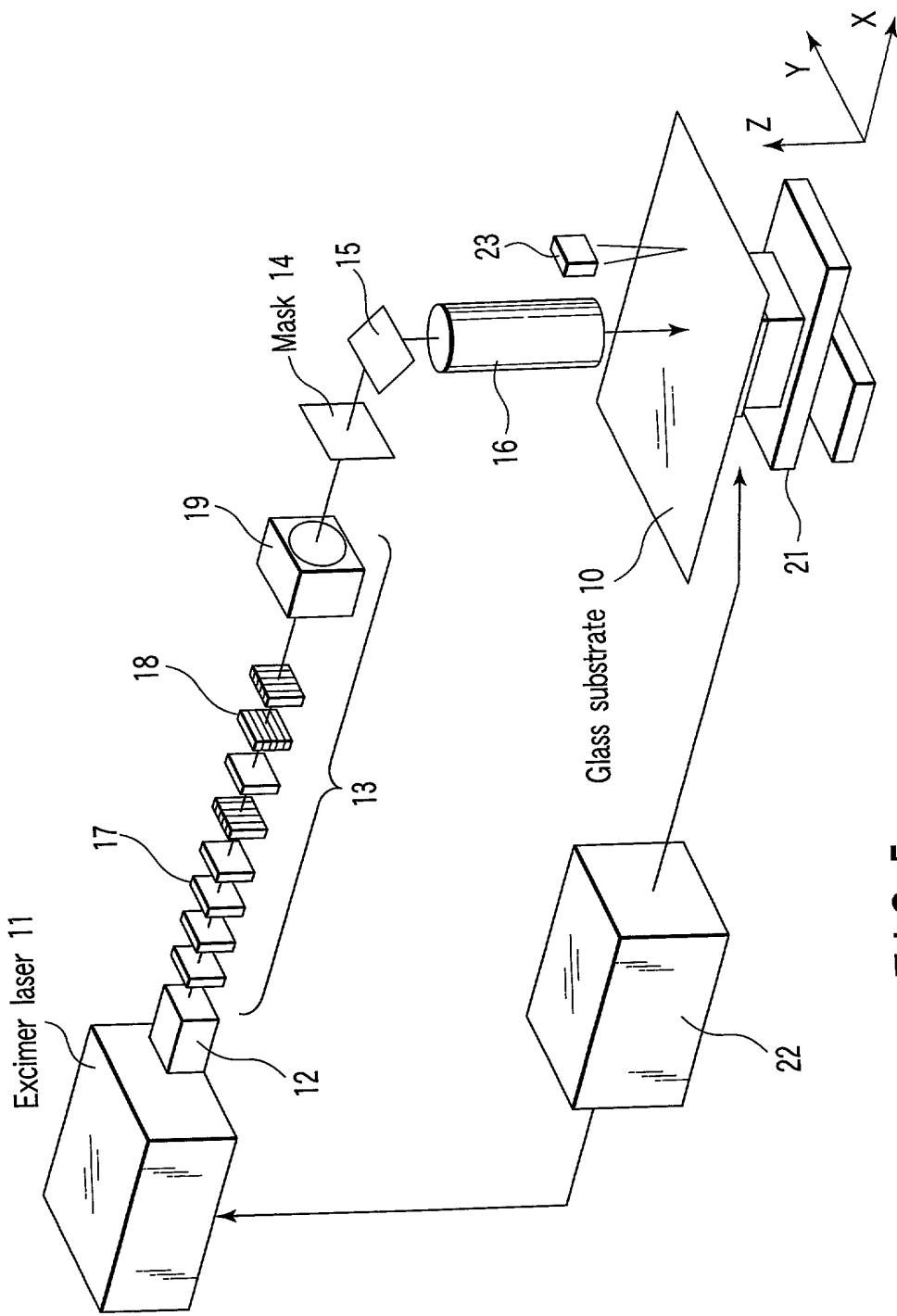


FIG. 5

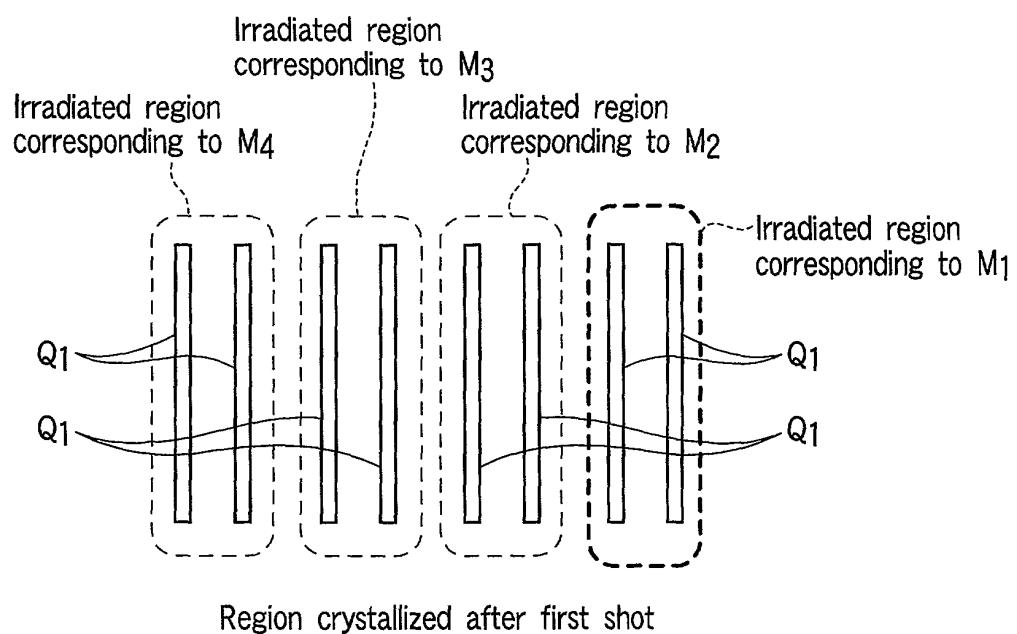
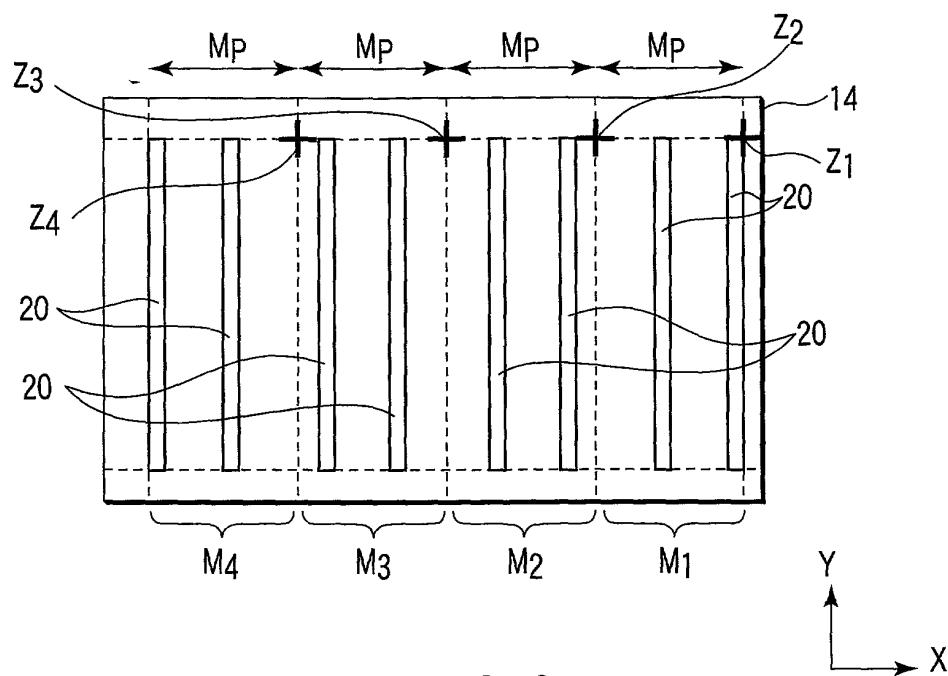


FIG. 7

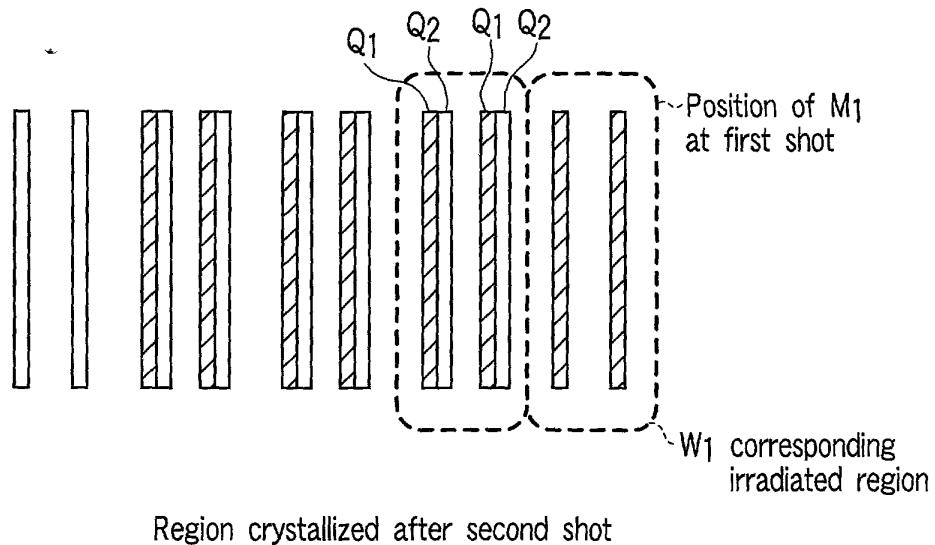


FIG. 8

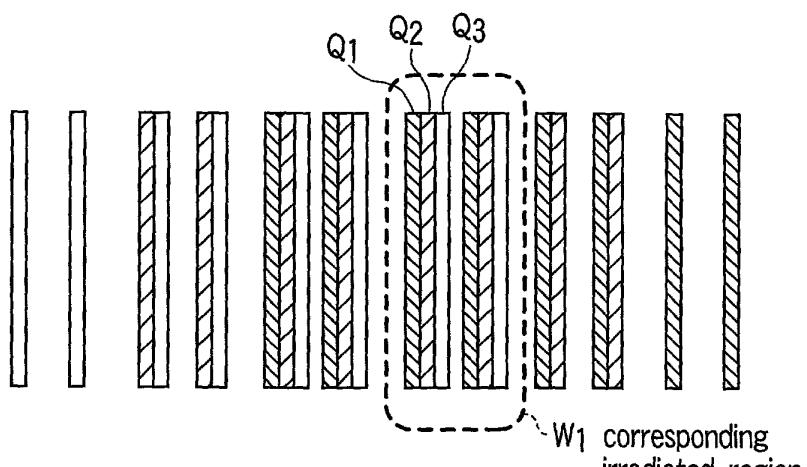
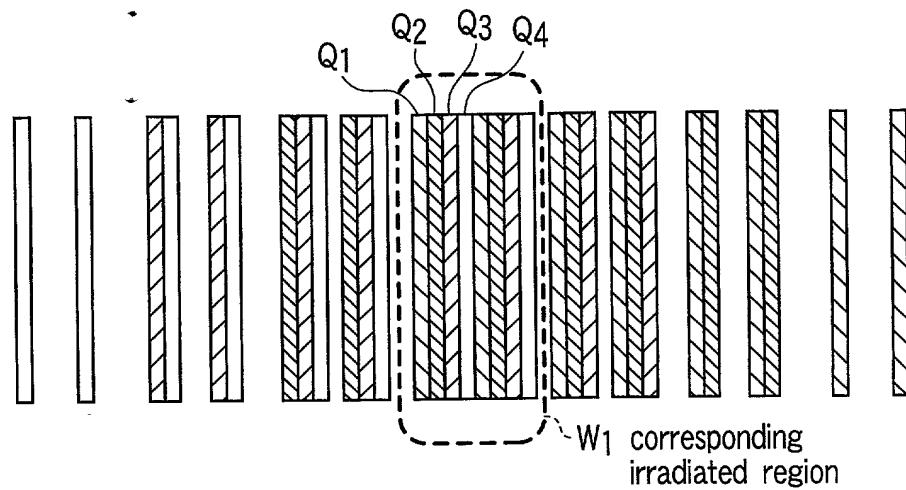
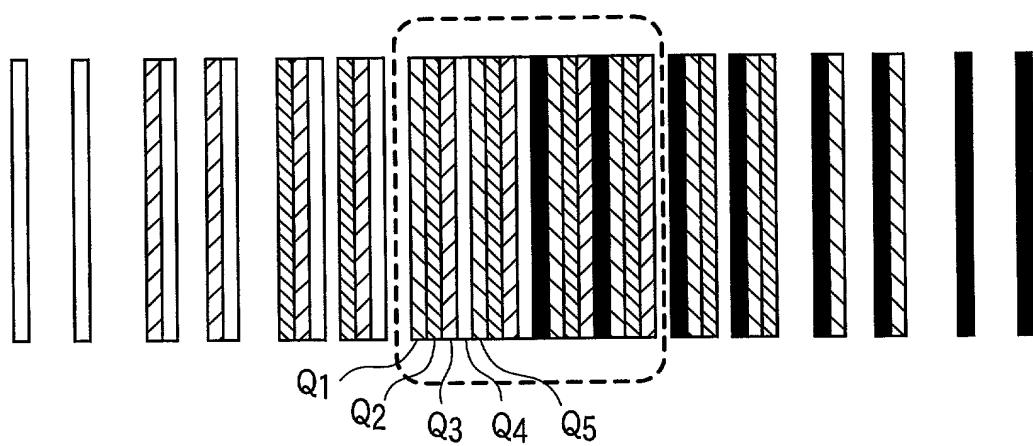


FIG. 9



Region crystallized after fourth shot

FIG. 10



Region crystallized after fifth shot

FIG. 11

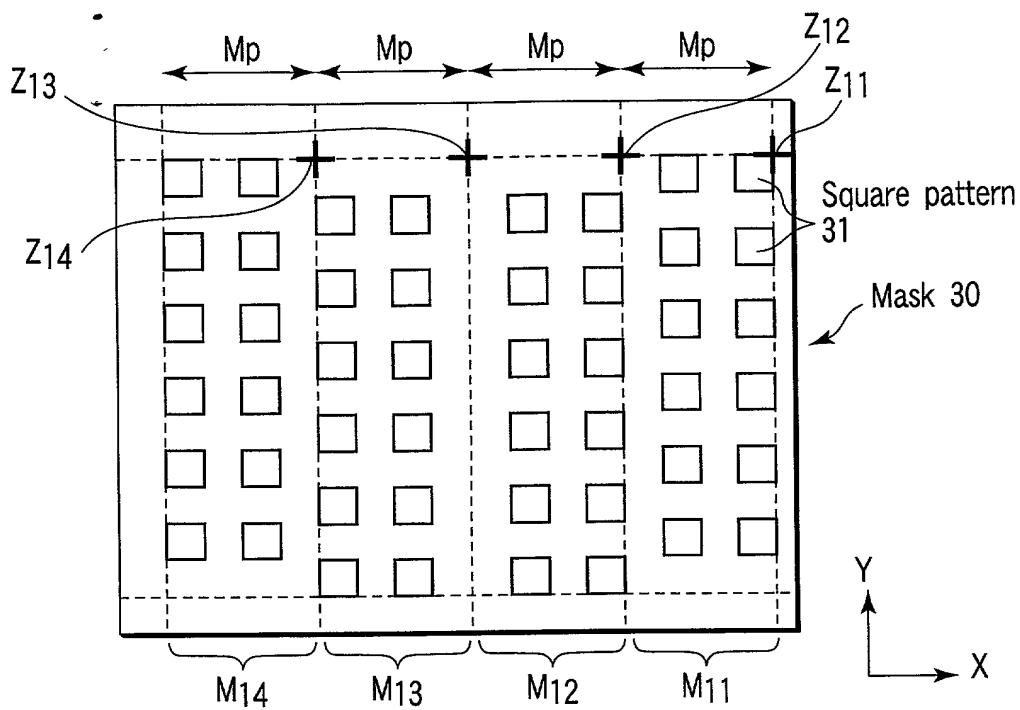


FIG. 12

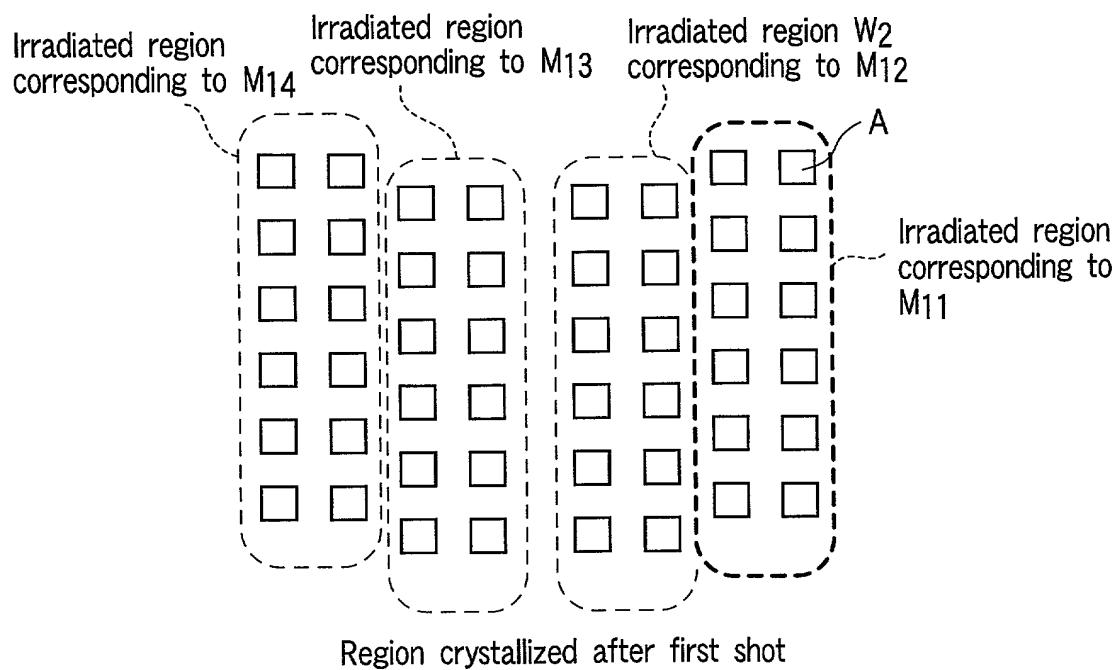
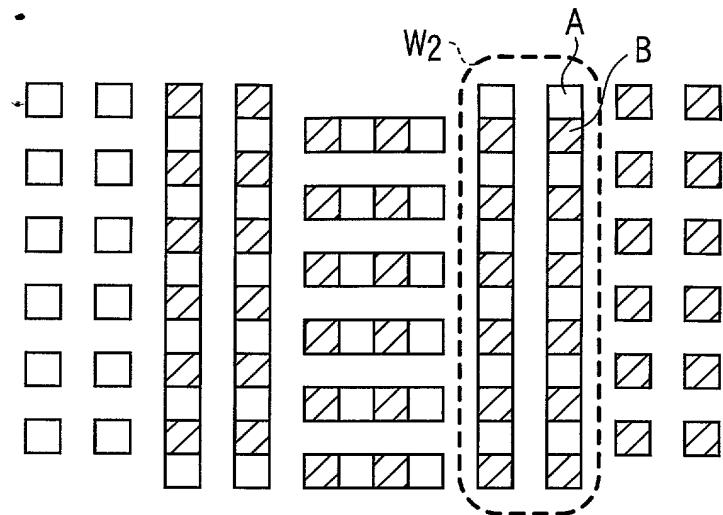
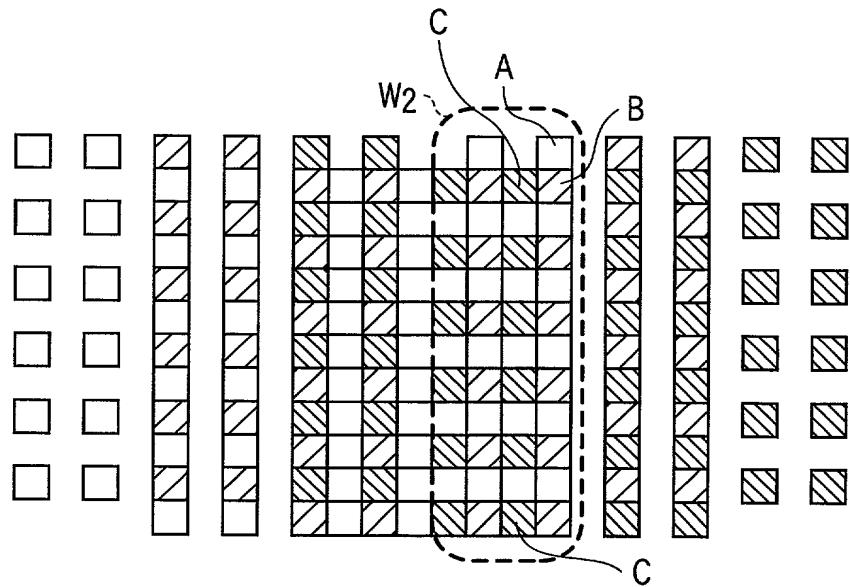


FIG. 13



Region crystallized after second shot

FIG. 14



Region crystallized after third shot

FIG. 15

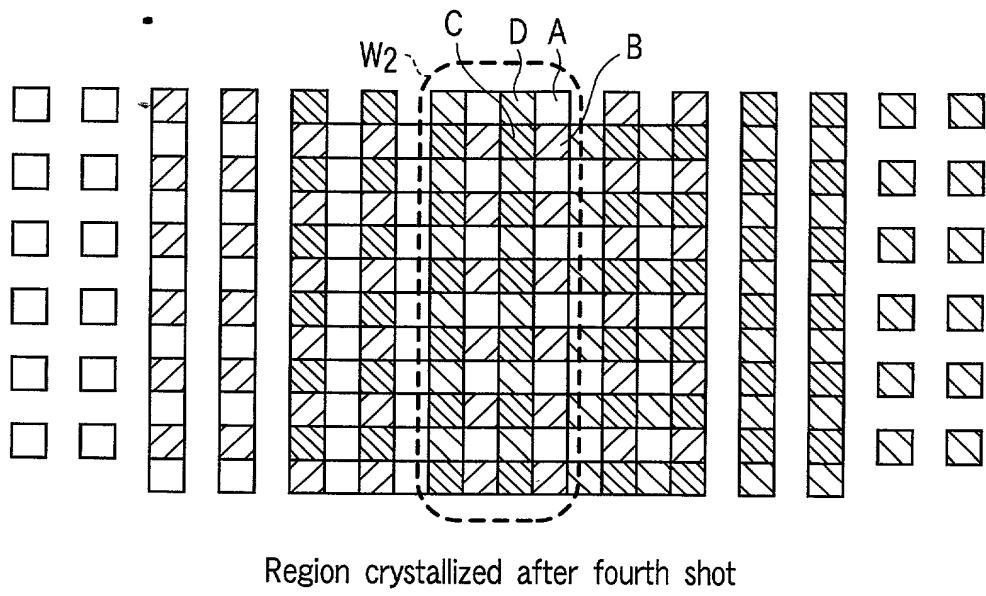


FIG. 16

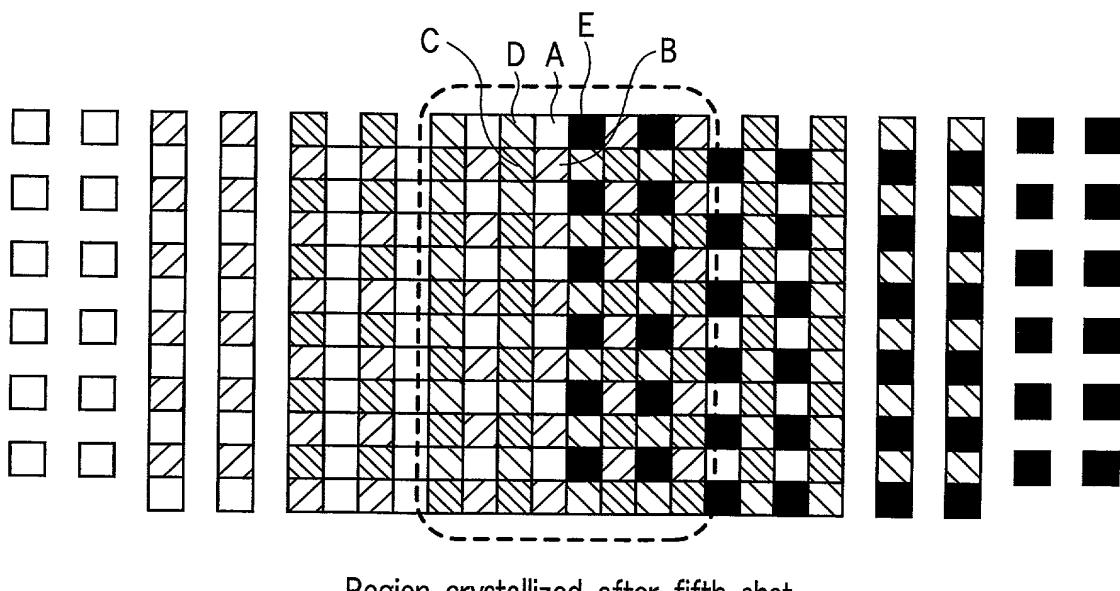


FIG. 17

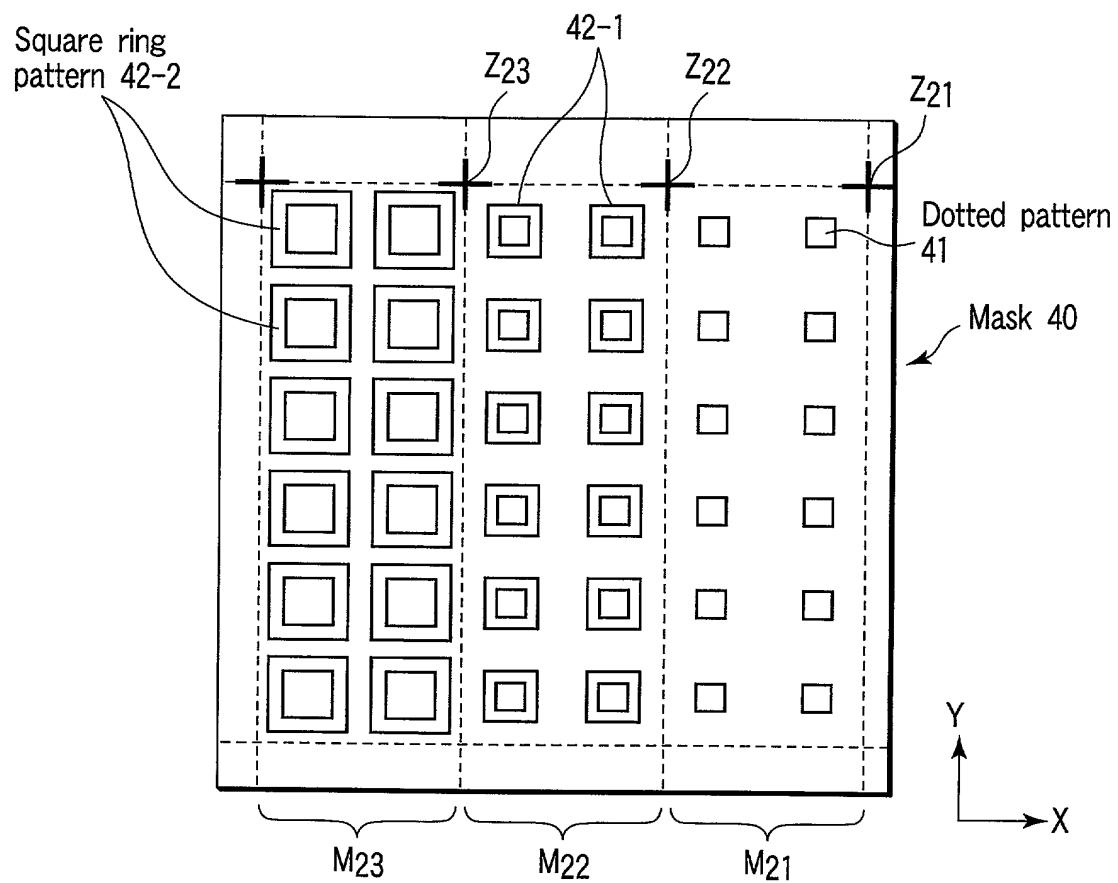


FIG. 18

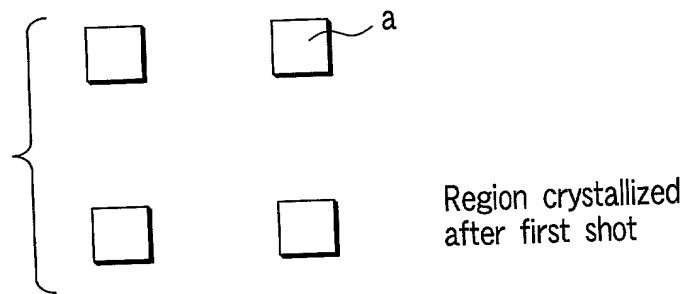


FIG. 19

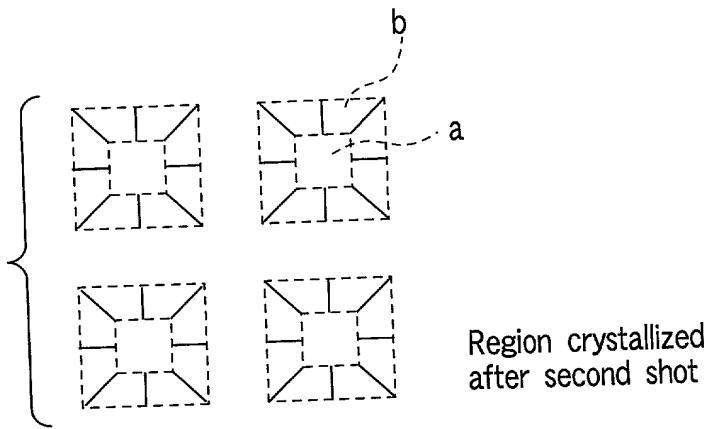


FIG. 20

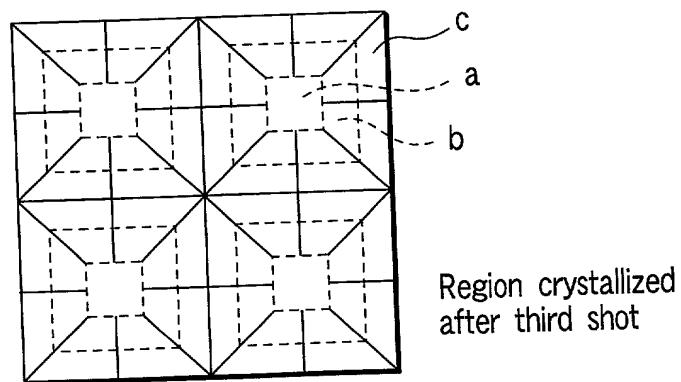


FIG. 21

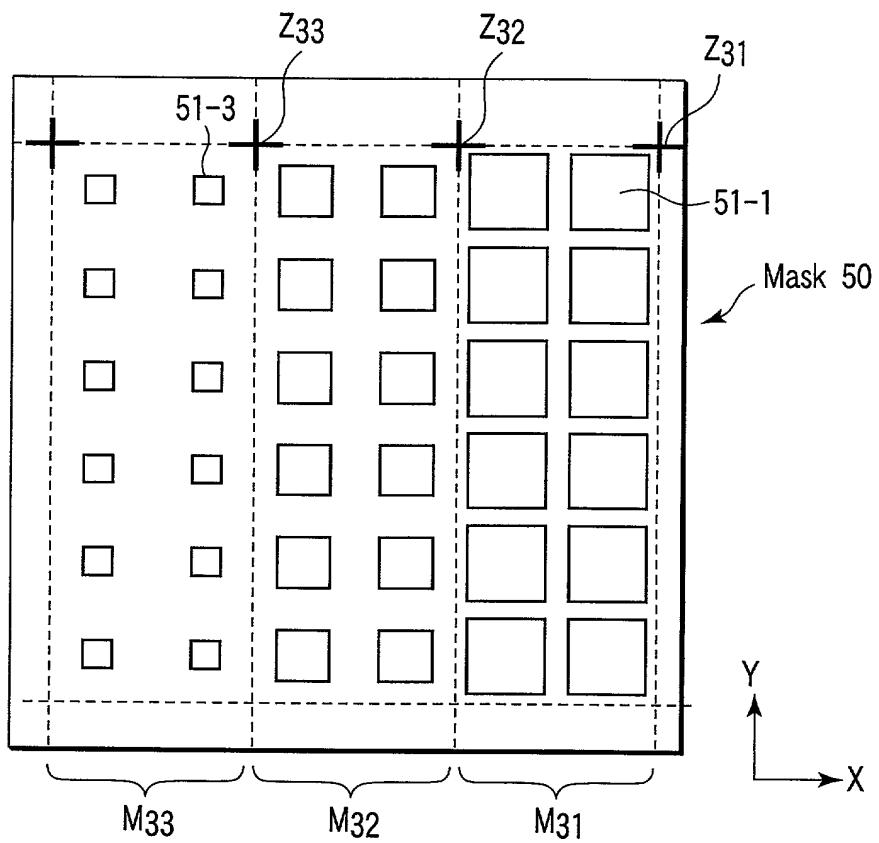


FIG. 22

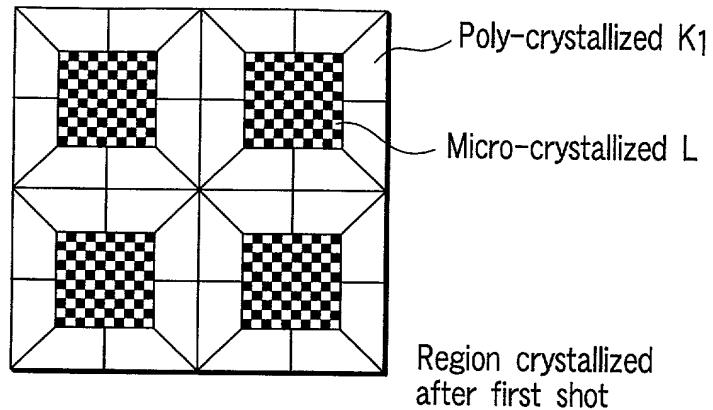


FIG. 23

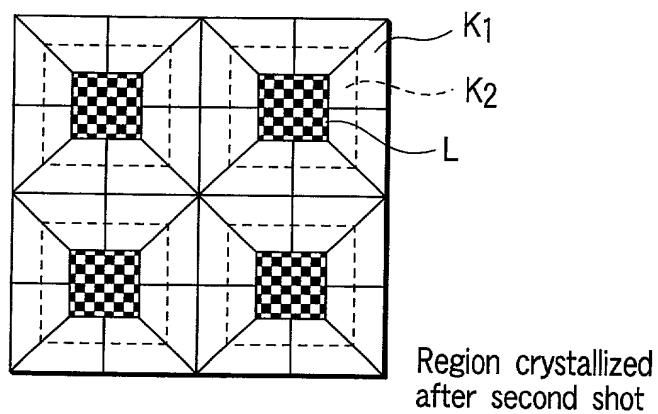


FIG. 24

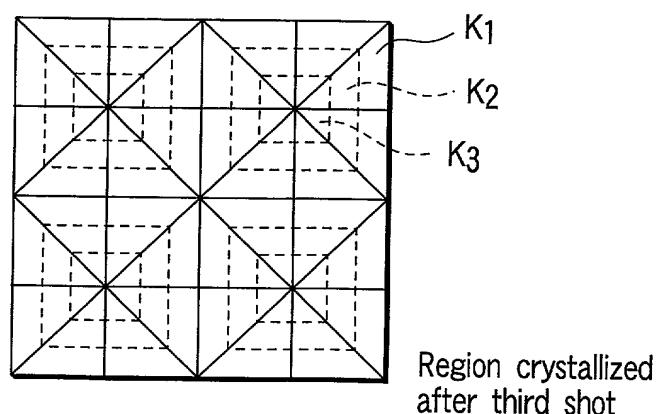


FIG. 25

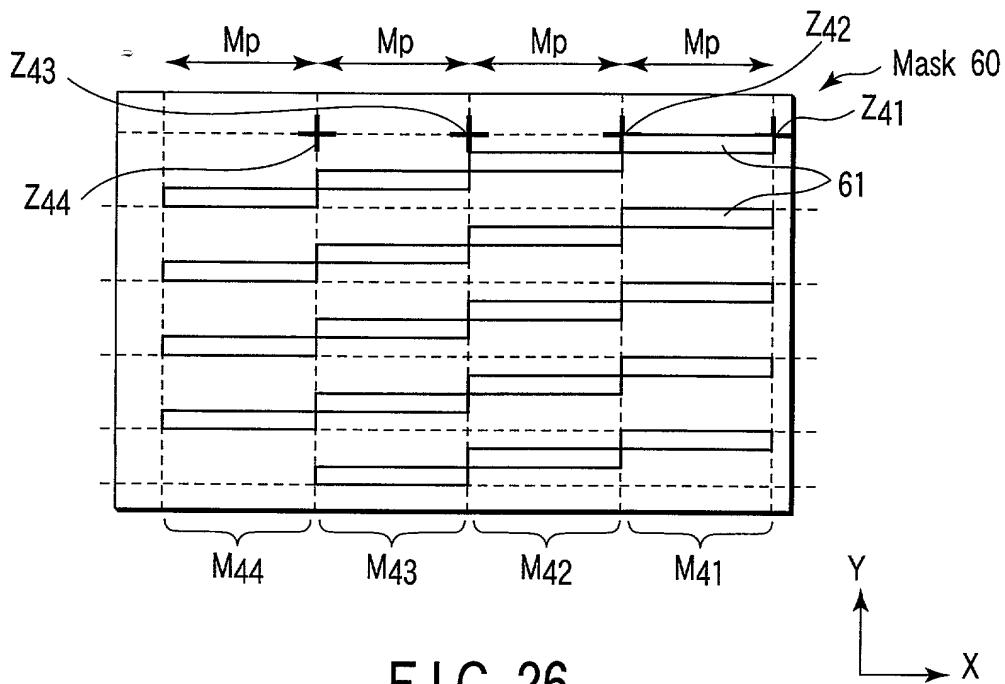
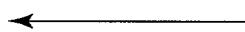
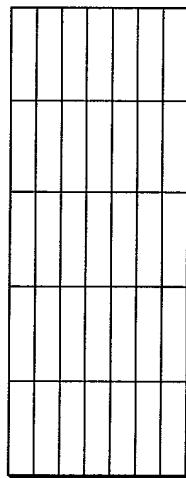


FIG. 26

Work movement direction



Crystal growth direction



Growth direction of crystal particle

FIG. 27

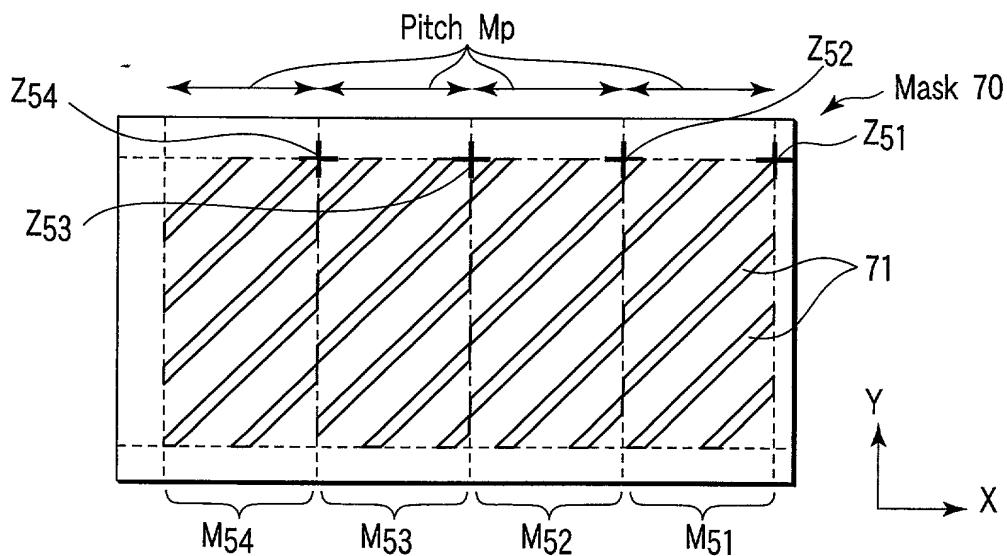


FIG. 28

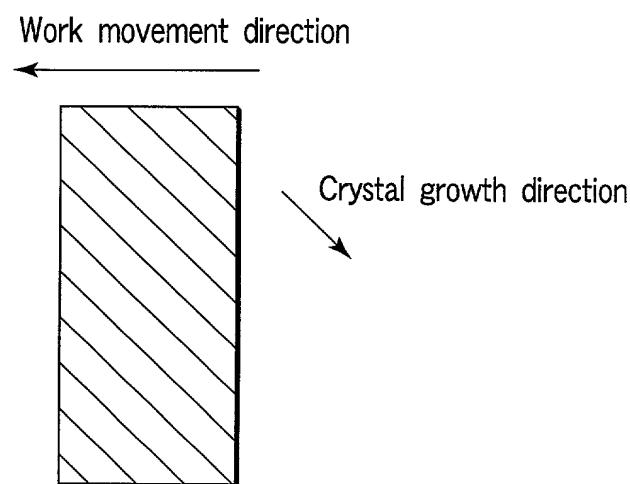


FIG. 29

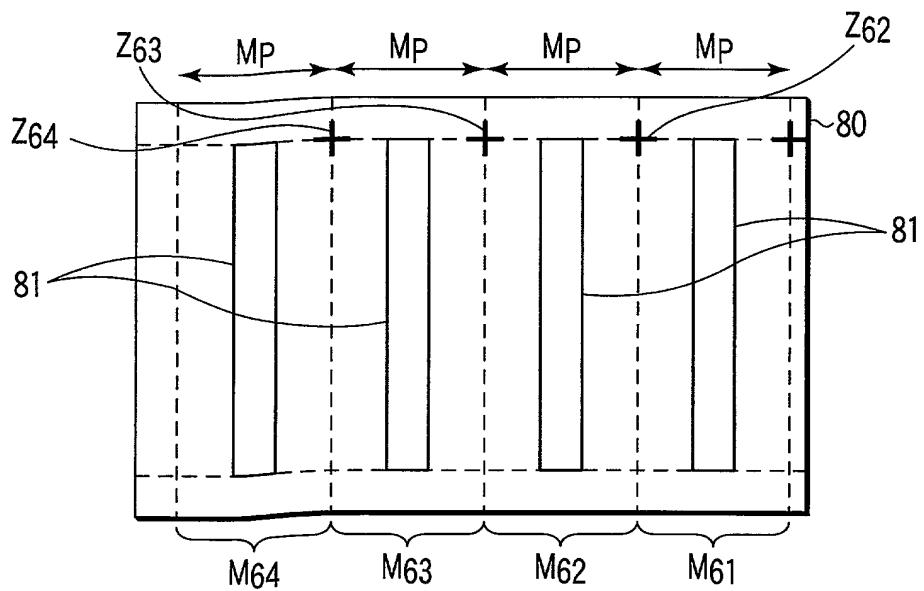


FIG. 30

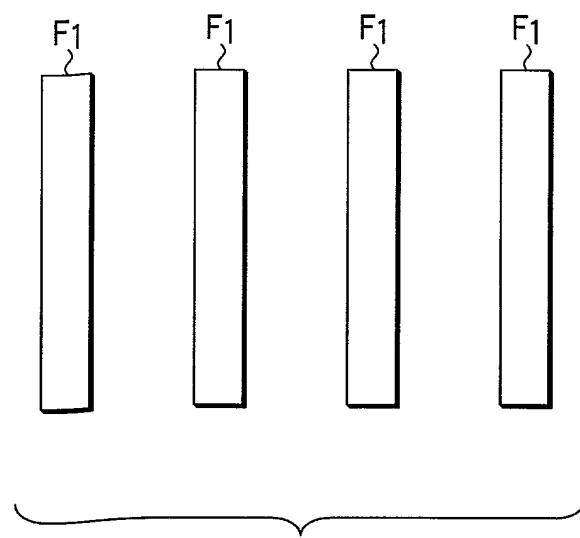


FIG. 31

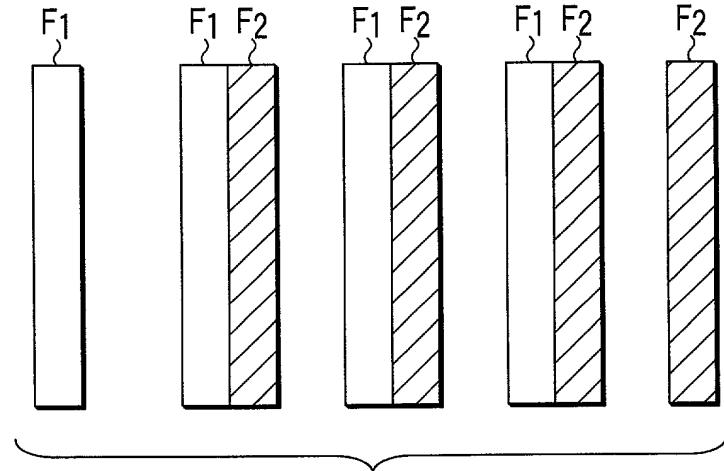


FIG. 32

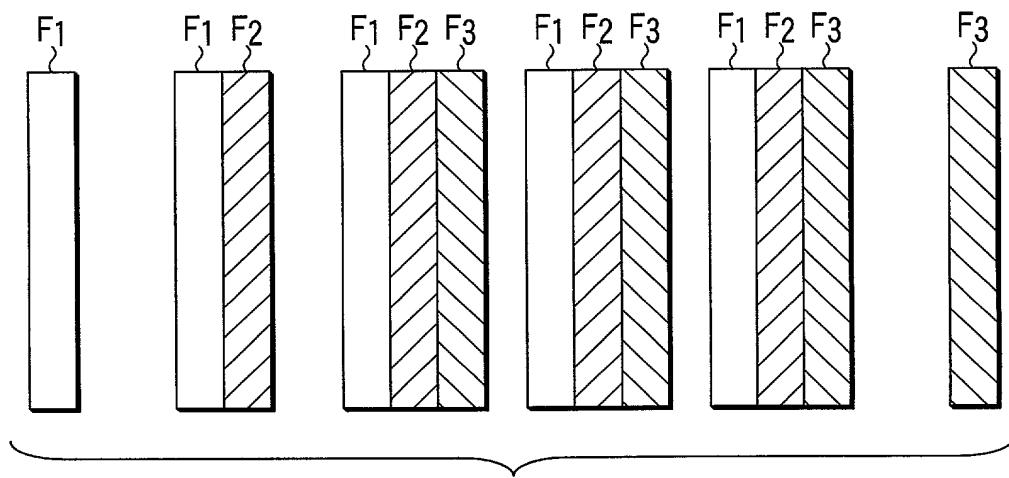


FIG. 33

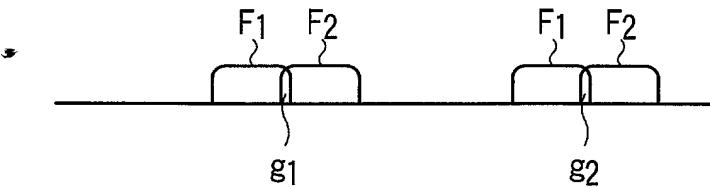


FIG. 34

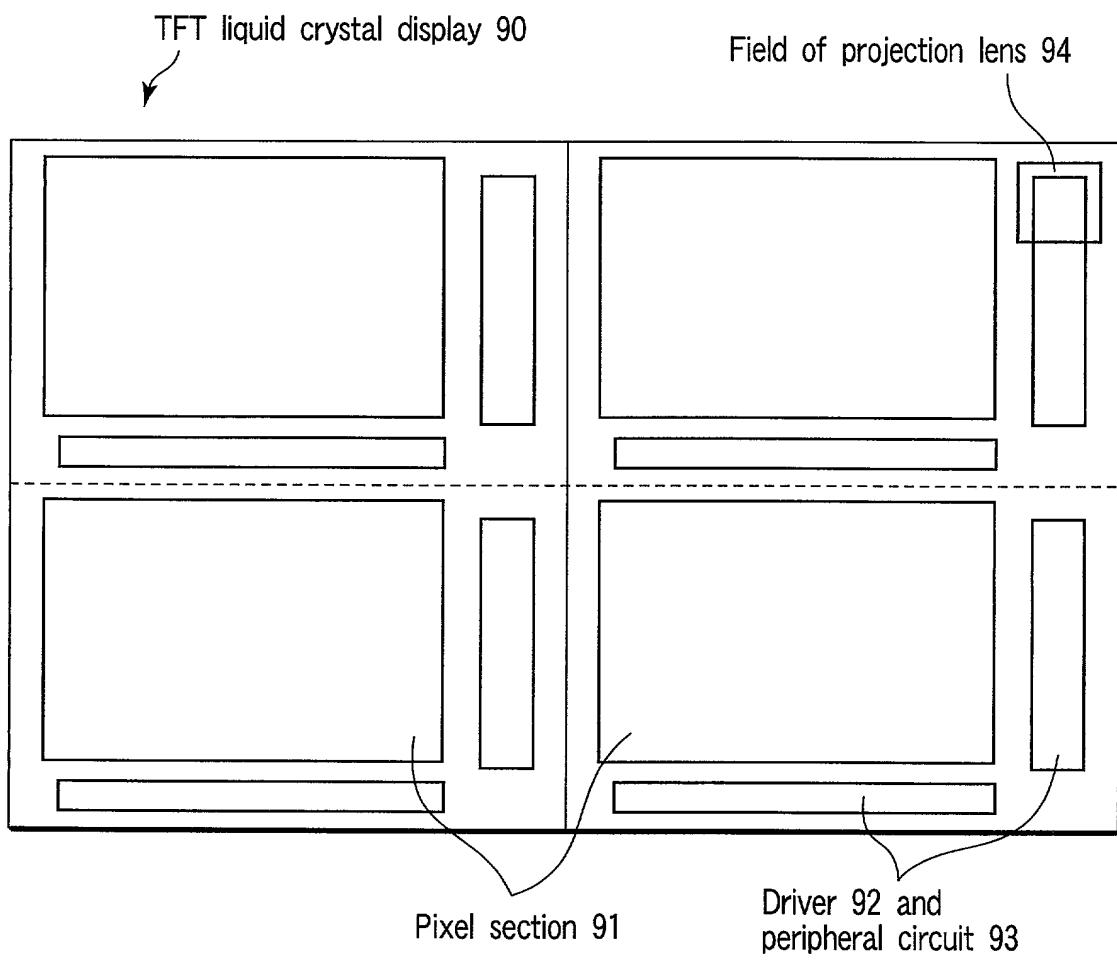


FIG. 35

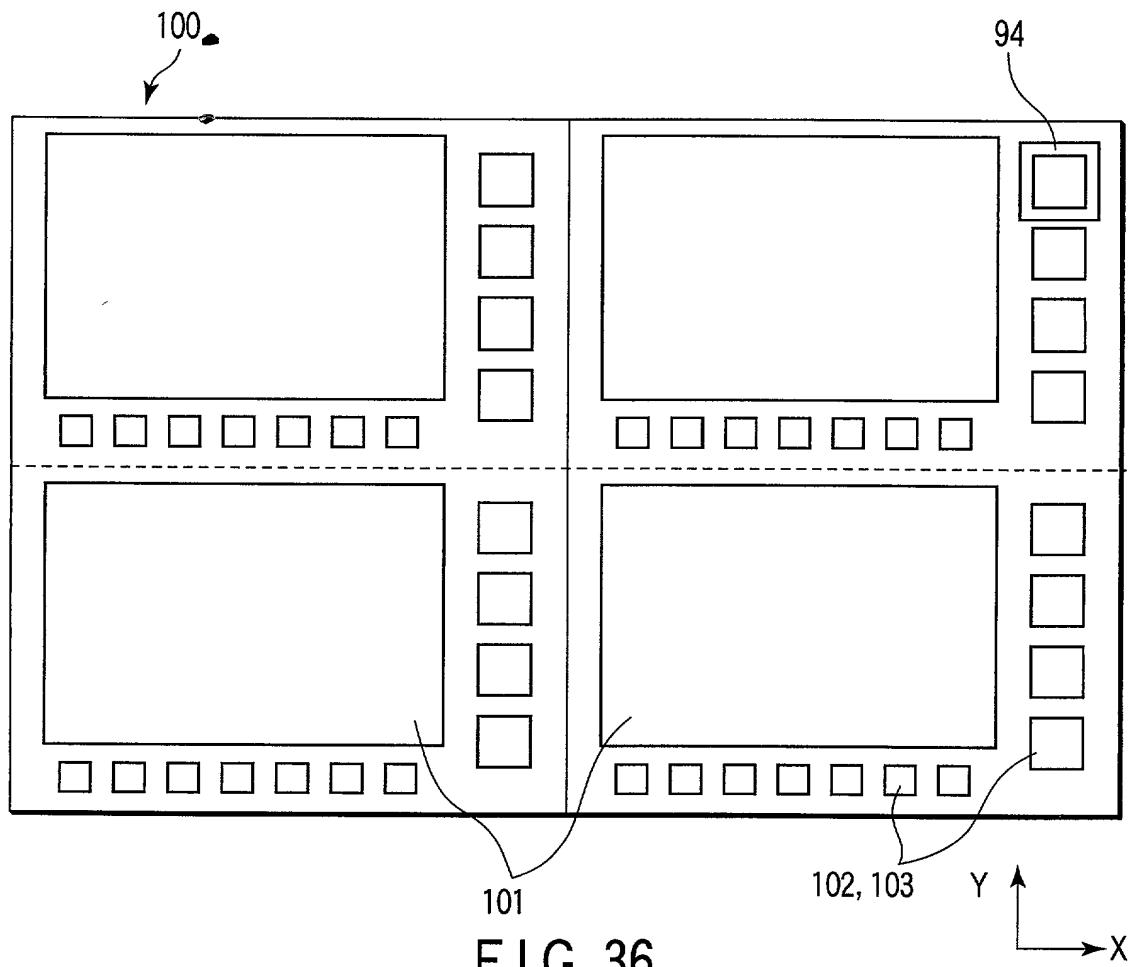


FIG. 36

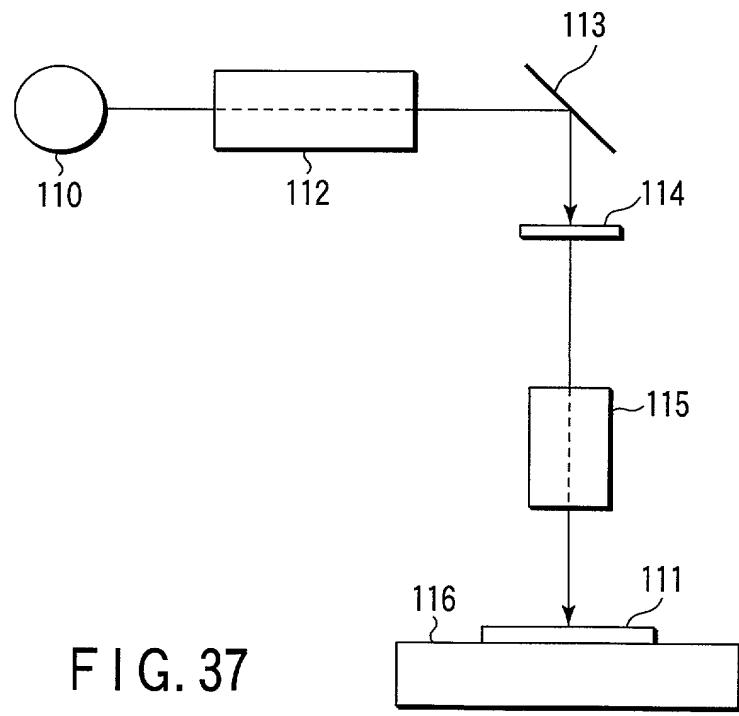


FIG. 37

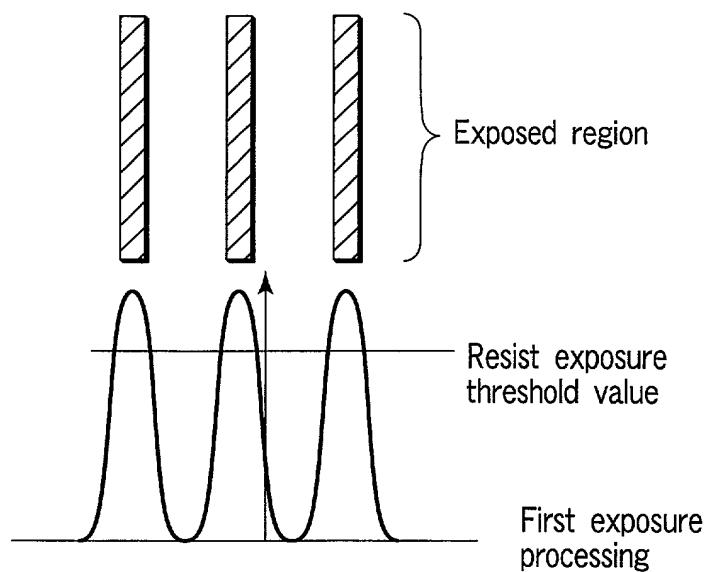


FIG. 38

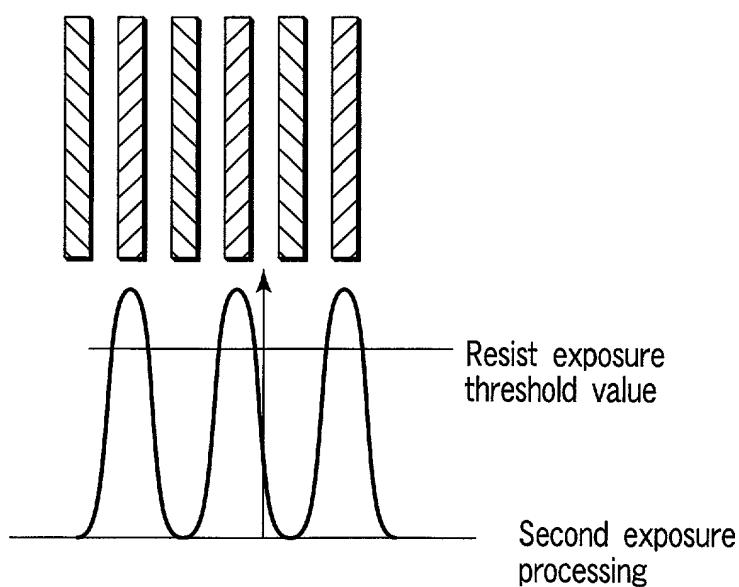


FIG. 39

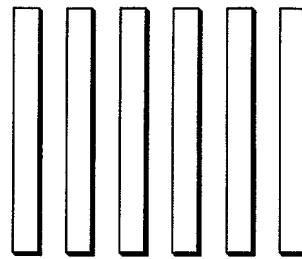


FIG. 40

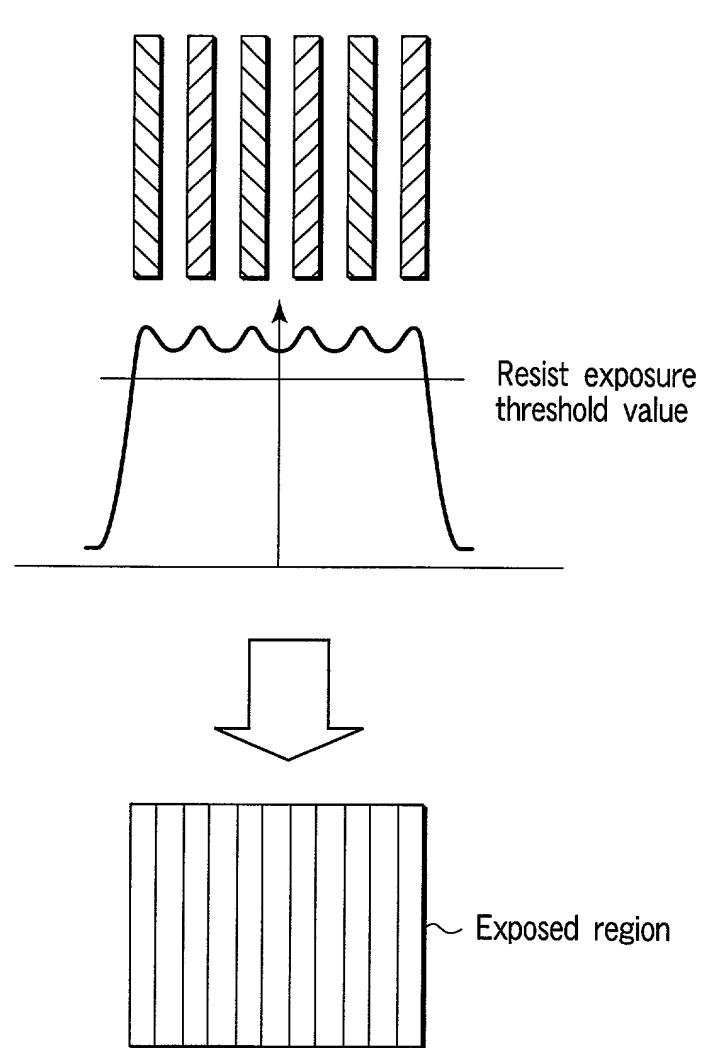


FIG. 41